

In the Claims:

1. (CURRENTLY AMENDED) A photometric measurement flow cell comprising:
a cell body having a first end and a second end;
a fluidic channel allowing the passage of fluids, contain within said cell body;
an element holder contained within said first end of said cell body wherein said element holder has a substantially planar sealing surface for receiving an element;
a non-adjustable stepped element having a stem and a base, said stem having an end surface protruding into said fluidic channel creating a fixed, nonadjustable fluidic measurement pathlength and said base having a substantially planar sealing surface;
said non-adjustable stepped element contained within said element holder and sealed within said cell body by a sealing gasket positioned between said substantially planar sealing surface of said non-adjustable stepped element and said substantially planar sealing surface of said cell body whereupon pressure exerted against said substantially planar sealing surface of said non-adjustable stepped element and said substantially planar sealing surface of said cell body cause said non-adjustable stepped element to be fixed and reliably sealed within said cell body with said stem protruding into said fluidic channel creating said fixed , non-adjustable fluidic measurement pathlength.

2. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is formed of fused silica glass.

3. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is formed of plastic.

4. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is formed of crown optical glass.

5. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is formed of flint optical glass.

6. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is formed of BK7 optical glass.

7. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is formed of sapphire optical glass.

8. (ORIGINAL) The photometric measurement flow cell according to claim 1, wherein said end surface is a plano optical surface.

9. (ORIGINAL) The photometric measurement flow cell according to claim 1, wherein said end surface is a spherical optical surface.

10. (ORIGINAL) The photometric measurement flow cell according to claim 1, wherein said end surface is an aspherical optical surface.

11. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is circular in cross-section.

12. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said non-adjustable stepped element is a geometric configuration selected from the group consisting of a square, rectangular, octagonal, and hexagonal.

13. (CURRENTLY AMENDED) The photometric measurement flow cell according to claim 1, wherein said element holder contains within it an entrance lens.

14. (ORIGINAL) The photometric measurement flow cell according to claim 1, wherein within said cell body is a lens holder containing an exit lens.

Claims 15-21 (CANCELED)

22. (CURRENTLY AMENDED) A method of creating an accurate fixed measurement path-length within a flow cell, which comprises:

providing a cell body having a fluidic channel allowing the passage of fluids within said cell body;

configuring an element holder contained within said cell body wherein said element holder has a substantially planar sealing surface for receiving an element;

selecting a non-adjustable stepped element having a stem and a base, said stem having an end surface protruding into said fluidic channel creating a fixed, non-adjustable fluidic measurement pathlength, said base having a substantially planar sealing surface, a length of said stem being selected to increase or decrease said fixed, non adjustable fluidic measurement pathlength; and

fastening said non-adjustable stepped element within said element holder with a sealing gasket positioned between said substantially planar sealing surface of said non-adjustable stepped element and said substantially planar sealing surface of said cell body whereupon pressure exerted against said substantially planar sealing surface of said non-adjustable stepped element and said substantially planar sealing surface of said cell body cause said non-adjustable stepped element to be fixed and reliably sealed within said cell body with said stem protruding into said fluidic channel creating said fixed, non-adjustable fluidic measurement pathlength.